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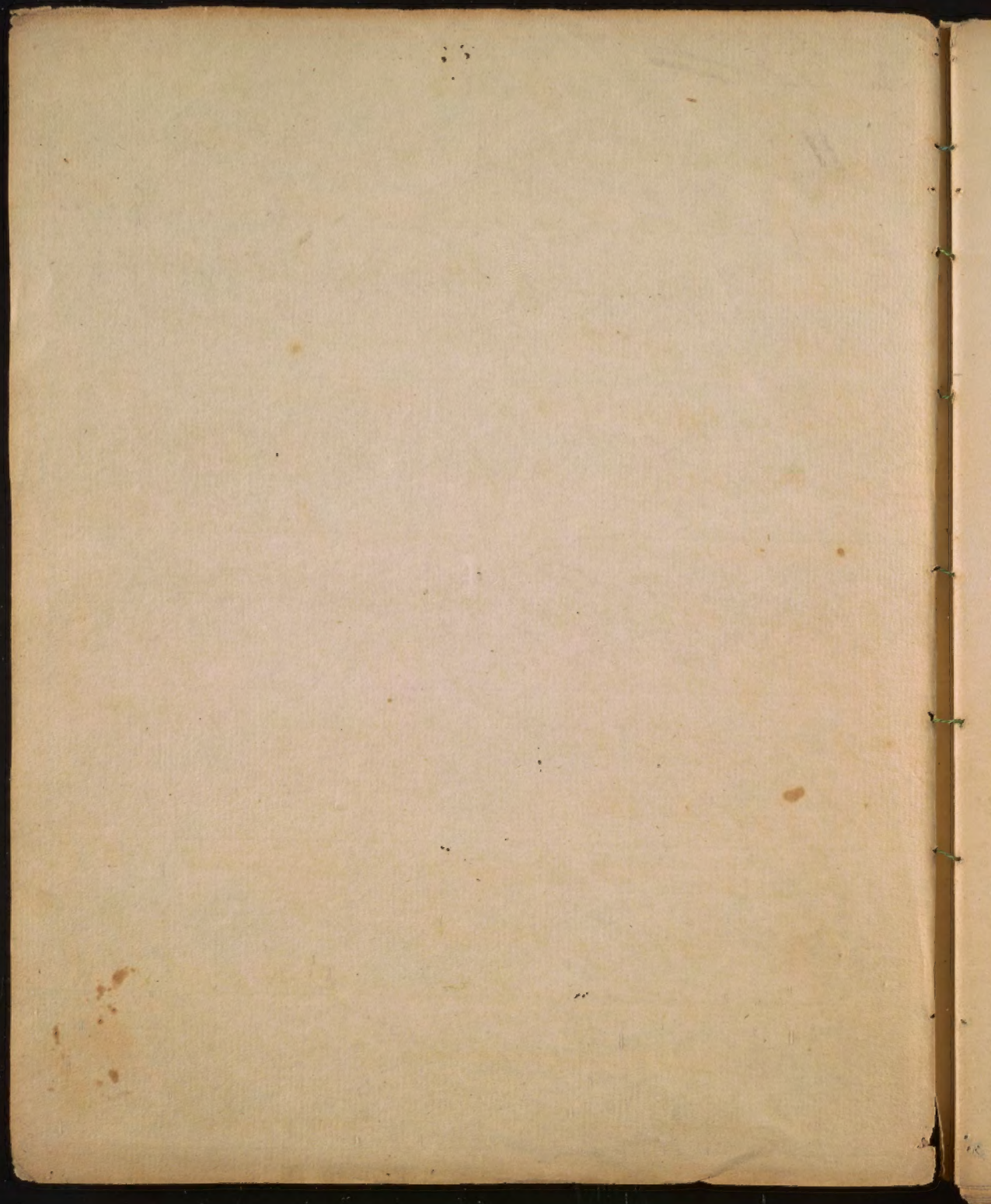
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11

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on the sensible qualities  
of the Air. of Cold - cont?







given of this fact is correct. I infer from the parts thus tinged of a red color, being pale before they become red, and after a while becoming blue or livid from a tendency of the parts in which the red blood is effused to a mortification. We see the same effects in the face of hard-drinkers, and of persons subject to anger, & from the same relaxation & previous state of the capillary vessels induced by the frequent determination of blood to that part of the body. —

4 We are told the Cold Bath ~~acts~~ acts by a stimulating power, and hence its great usefulness in a debilitated state of the body.

— The ~~first~~ ~~impression~~ of Cold Water <sup>in</sup> ~~acts~~ <sup>acts</sup> in two ways. ~~For~~  
 this body ~~is~~ <sup>can</sup> act in ~~one of two or both~~



The first thing I noticed when I stepped  
 out of the car was a warm blanket of  
 sun on my face. The air was thick with  
 the scent of pine and the distant hum of  
 a lawnmower. I took a deep breath, feeling  
 the cool grass beneath my feet. The world  
 seemed so peaceful, so quiet. I walked  
 slowly, savoring the moment. The sun  
 was just beginning to set, painting the  
 sky in shades of orange and pink. The  
 trees were silhouetted against the glowing  
 horizon. I felt a sense of calm, a sense  
 of being in the right place at the right  
 time. The world was perfect.



40  
~~the~~ It stimulates <sup>to</sup> mechanically by the  
force with which it is impelled against  
the body. This is evidently the case with  
the Shower bath, and 2<sup>ly</sup> it abstracts heat  
and ~~excites~~ reduces excitement, and thus  
accumulates excitability upon which  
the common stimuli of life - the exertions  
in the bath, & in coming out of it, and  
the external air (now much warmer  
than the body) all act in such a man-  
-ner as to produce elevated excitement  
and in some cases the morbid exite-  
-ment of fever. The primary ~~of~~ effects of  
the Cold Bath are ~~indirectly~~ <sup>indirectly</sup> sedative. Its  
stimulus is wholly of an indirect <sup>nature</sup>.

5 It is ~~and~~ but sometimes <sup>draught</sup> a ~~draught~~  
of Cold water suddenly induce partial or







41  
general sweats. Are not these sweats the  
effects of a stimulating power of in cold?  
- I answer - no - the cold water in this  
case acts <sup>only</sup> by reducing the system to the  
sweating point. we see the same thing  
occur from bleeding, and from other  
depleting medicines. we see it likewise  
from the external application <sup>of</sup> cold  
water to the body in a fever. I have  
<sup>seen</sup> once this sweat in a fever ~~to be~~ con-  
fined exclusively to the part of the body  
to which the <sup>cold</sup> water was applied. It was  
<sup>a patient in</sup> in the Pennsylvania hospital. -

6 The Cutis Anserina which is induced  
by cold, ~~has~~ been ascribed to <sup>its</sup> supposed  
stimulating power. ~~this appearance~~  
~~It is probably the~~  
<sup>upon</sup> ~~state~~ of the skin ~~is~~ is proba-  
- bly



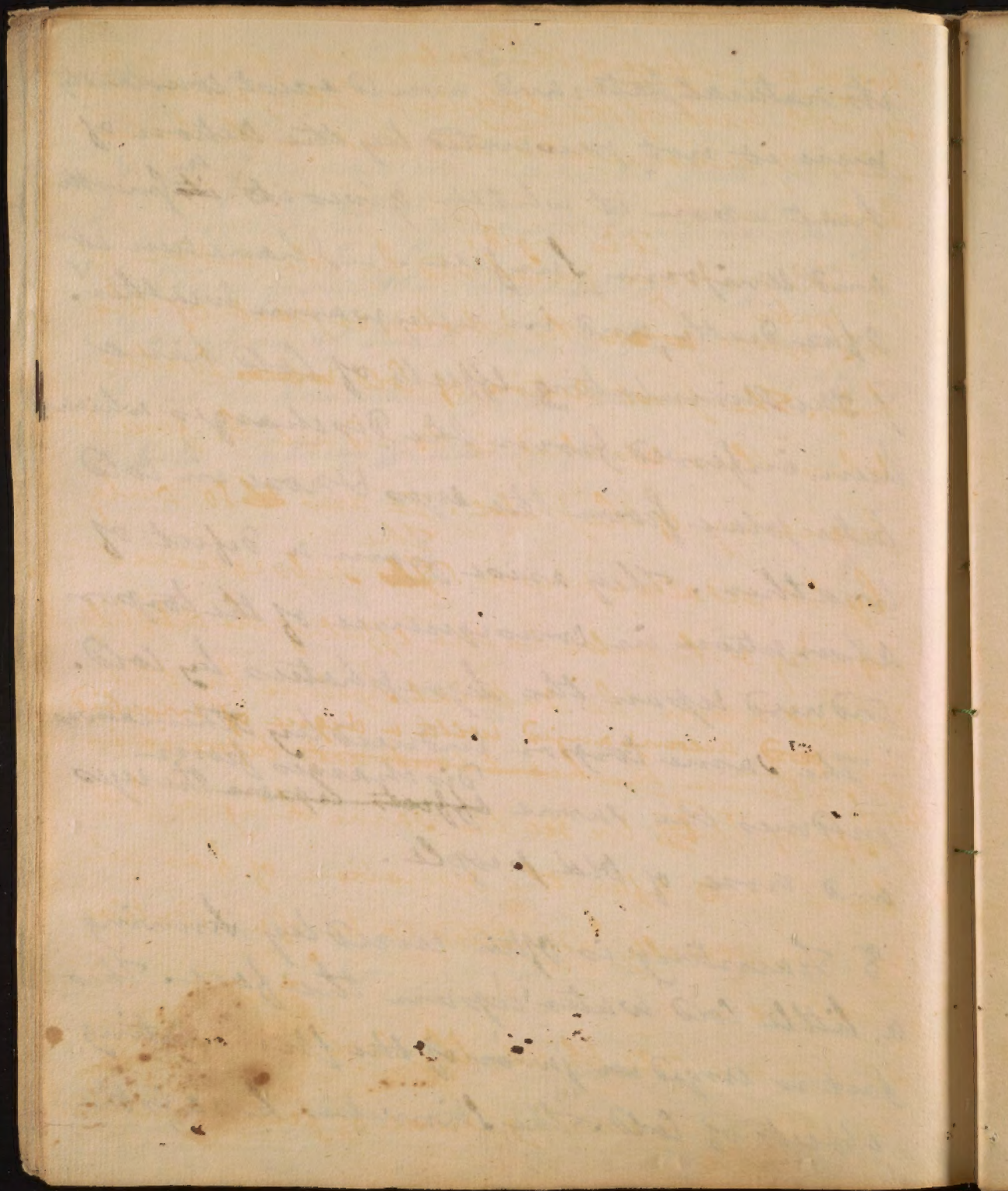
V or if be not its natural state, it may  
be induced by <sup>such</sup> a partial contraction of  
the skin from the Abstraction of the  
Stimulus of heat - as to leave a part  
of the extremities of the nerves or blood =  
=repels in this natural state.



its natural state, and <sup>172</sup>would exist constantly  
were it not prevented by the action of  
heat upon it which gives it <sup>a</sup> smooth  
and uniform Surface. — I have seen it  
after death, and in very warm weather.  
The stimulating effects of Cold have  
been inferred from the Discharges which  
take place from the eyes & nose in cold  
weather. They arise from a defect of  
absorption in consequence of the torpor  
induced upon the Lymphatics by cold.  
— The same torpor induced by other causes  
produces the same <sup>Discharges from</sup> effects ~~upon~~ the eyes  
and nose of old people.

§ Fainting is often cured by throwing  
a little cold water upon the face. This  
fact is urged in favor of the stimulating  
effects of Cold. The Stimulus here is the







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weight and force of the water acting upon a sensible part of the body in a state of excitability suddenly accumulated, and that in the highest degree. —

9 The pulse <sup>it is urged,</sup> is ~~increased~~ <sup>is</sup> ~~increased~~ by the action of <sup>water</sup> cold upon ~~the~~ the whole, or part of the body. The first action of cold ~~water~~ water when thus applied, is to reduce the force & frequency of the pulse. It does ~~so~~ so, only by its relative power. <sup>The</sup> subsequent frequency of the pulse is the effect of the debility induced upon the Arterial System by the cold, ~~and~~ accompanied with a degree of morbid ~~hence the heart contracts before it is~~ <sup>Anticipation</sup> ~~hence~~ of blood we see the same thing in low fever, and after the operation of fear which is universally admitted to be of a sedative nature.

10 We are told that the Cool or Cold air is often an exciting Cause of fever — and that



V Not only fever, but even convulsions  
in the ~~muscular~~ muscular system, are  
sometimes brought on by the same  
sedative causes.



it must act in this case by a stimulating  
 power. <sup>To this I answer,</sup> ~~The cold acts~~ - that the  
 cold, or Cool Air may act in two ways  
 1 by checking perspiration which by  
 stimulating the Capillaries directly, or by  
 being absorbed, and thrown upon insensible  
 parts, may induce fever, or 2<sup>ly</sup> it may  
 act by <sup>as I formerly said</sup> suddenly destroying the equilibrium  
 of the system by its sedative power. In  
 this way a temporary fever is sometimes  
 induced by fear and grief both of which  
 we know to be sedative passions. A fever  
 is even induced by bleeding when <sup>advised</sup> ~~directed~~ to  
 remove ~~local~~ congestions in the brain, <sup>and</sup>  
 this remedy <sup>we know to be of sedative nature.</sup>  
~~and from the same~~ <sup>same</sup> operation. I  
 know the followers of Dr Brown ascribe the  
 production of fever to the heat which succeeds  
 the application of Cold to the body, and



#11<sup>ly</sup> and lastly. I infer cold to be a sedative  
from its always inducing <sup>accumulating</sup> ~~an~~ <sup>an</sup> ~~intermittent~~ <sup>intermittent</sup>  
excitability in the parts ~~to~~ <sup>of</sup> the body  
to which it is applied - ~~provided~~ <sup>now known</sup>  
- lents of all kinds expend excitability, or con-  
- vert it into excitement. This single fact is  
sufficient to establish the principle I am  
defending. In speaking of the accumulation of  
excitability by cold, take notice I mean only when  
it is suddenly applied, and continued for a short  
time. when applied a great while it is expended as  
in the cold climates of Sweden & Russia.

V The Abstraction of light, as fear is the  
as debility and disease are the effects  
abstraction of courage, so cold is the  
of the abstraction of strength,  
effect only of the abstraction of heat. +

shall resume ~~this~~ and apply this doctrine

when I come to treat of the cure of

fevers.

+ So forcibly did the truth of the opinion  
I have defended, strike the late Dr Beddes  
that he has left it upon record, that if he  
were to fix upon a criterion to establish  
the greatest possible prejudice or obliquity  
of the human Understanding, it should be



hence they have changed the common  
 phrase of taking a cold to "taking a heat".

That fevers are sometimes taken in this  
 way there can be no doubt, but it is  
 only when the heat succeeds the long and  
 feeble degree ~~but I believe they are~~  
<sup>in the ways I have mentioned viz stoppage of perspi-</sup>  
 much often induced by the sedative action  
<sup>nation or</sup> of the cold suddenly destroying the equilibrium  
of the system. The autumnal fevers

appear to be brought on in this way  
 when they make their first attack after  
 wearing <sup>too</sup> thin clothing, or sleeping <sup>too</sup> long  
<sup>too</sup> <sup>bed</sup> light or <sup>too</sup> covering. — The action of the

cold is much favoured by the body being  
 impregnated with miasmata from vegetable

Harmonical preface at in the fall of  
~~of the year of fevers with the~~  
~~come to~~ ~~of the year of fevers~~ ~~with the~~ ~~therefore that~~  
 as moral evil is the effect of the abstraction of  
 moral good, as darkness is the effect of V



a belief in the ~~for~~ stimulating effects of Cold  
& the sedative effects of Opium. I <sup>conclude</sup> subscribe  
the truth of the remark.

follows the  
V In this ~~off~~ respect it an analogy of  
the negative wills to which I have just  
now compared it - for moral will, -  
Doubt, <sup>and Debility</sup> and fear all produce the most  
serious positive ~~and~~ effects.



~~The weight and force of the water acting upon  
a sensible part of the body in a state of  
the highest degree of accumulation at  
excitability suddenly accumulated, &  
that too in the highest degree.~~

While I thus ~~deny~~ ~~that~~ ~~the~~ ascribes a  
negative quality, or a sedative operation  
to cold, I admit that it produces many  
positive effects upon the system. I shall  
now proceed to enumerate <sup>the morbid effects of cold.</sup> ~~them~~. They  
will furnish <sup>many</sup> ~~many~~ further proofs  
that cold does not possess stimulating  
powers.

1 ~~Let~~ Cold induces debility and excitability  
upon the Arterial System, and thus disposes  
to all the different forms of fever. When  
very intense, it creates pain in the  
breast. This was sensibly felt by the



likewise

✓ It weakens and sometimes destroys  
 sensibility, and that to such a degree that  
 it means tells us the natives of the  
 northern extremity of our country feel  
 no pain from wounds made with  
 glap in the soles of their feet.



French Academicians who went to measure  
a degree near the North pole. It sometimes  
brings on Hemoptysis. <sup>It also disposes v. d. goes to bed.</sup>

2 It affects the nerves with <sup>pain</sup> torpor, <sup>and</sup>  
thus disposes to the hypochondriac Disease.

3 It produces languor in the muscles & an  
indisposition to voluntary motion. hence  
it has been said the inhabitants of cold  
Countries were made to be slaves - the  
will being too weak in them to overcome  
the languor in their muscles, it should be  
stimulated into action by the will of a  
master. This argument to be true should  
be reciprocal ~~of~~ between master &  
Slave, for the effects of cold are the same <sup>upon</sup> ~~in~~  
each of them.

4 Cold when intense, induces first ~~head~~  
~~then sleepiness and afterwards~~ acts upon  
the brain, and induces pain - sleepiness



# By opening perspiration, and thus removing  
the natural moisture and softness of the skin  
it dulls the sensation of touch.

It says that Animals that perish with  
cold retain their Appetites to the last  
of their lives.

~~It~~ Cold when applied permanently, changes  
even the figure of the face. It contracts the  
eye lids - and raises the <sup>eye</sup> brows - By the  
pressure of the lower jaw against the upper,  
to open the pain of <sup>cold</sup> it elevates the cheek-  
bones and lengthens the length of the face, and  
thus produces this assumption of generations  
the contracted & broad face <sup>as</sup> is observed  
in the inhabitants of cold northern countries;  
Pitme



and death. 5

It debilitates the faculties of the mind.

It affects several of the senses. I have already mentioned its effects upon the sense of touch. It opens the <sup>in inducing pain</sup> ~~sense~~ <sup>taste</sup> and dulls the sense of vision, <sup>in part</sup> probably by its being generally accompanied with the reflection of the rays of light from the snow.

Cold invigorates the appetite, especially for animal food. Horses eat more <sup>opened</sup> in cold stables than in close and warm ones. The stimulus of abiment serves to counteract the debility induced by the cold. It even awakens appetite in ~~hot climates~~ when it succeeds a hot day in the middle of the night in warm climates. Dr Arbuthnot

The effects of cold upon the skin are as various as the effects of heat. By

V Cold when applied for a long time  
produces fous and Ulcers on the Skin.  
This was remarkably <sup>in the sailors</sup> the case on  
board the American Sloop of War the  
rentles in the winter of 1811.12.



Obstructing perspiration it disposes to cutaneous eruptions. or when it has not this effect, it increases the secretion & discharge of Urine. This is so frequently the case that Dr Sydenham recommends the application of it to the Skin to remove the Suppression of Urine which sometimes takes place in the malignant fever. - It renders sweating more difficult, and hence the propriety of resorting to other modes of depletion in the fevers of Cold climates. When applied for a long time it ~~darkens~~ <sup>produces a dark</sup> the white color upon the Skin resembling that which is produced by the long application of heat. It ~~also~~ weakens the Venereal Appetite. Perhaps it may have this effect by the reflections which attend it induces of the difficulties of supporting a numerous family of Children

✓ It appears not only in the reduced fire of the body, but <sup>in</sup> of the shorter length of the face. They are ~~both induced by~~ natural operations of the cold is aided by nature to obviate cold in the limbs & body, and by the #

~~I shall conclude this Account of the positive effects of Cold by taking notice of a fact lately established by a number of experiments made by Dr DeLaroché of Geneva, and that is - Animals live longer in a temperature of Air lower by a greater number of degrees than 95° or animal heat, than above them.~~

✓ Effects of heat.

# the pressure of the lower upon the upper jaw. The last shortens the face.



where ~~for~~ the means of subsistence are  
less abundant than in warm countries.

10. Cold contracts the solids of the human body  
in such a manner as to diminish this  
in a lapse of generations the fire of animals.  
The human body is lessened by it. This is  
observable in the inhabitants of the extremity  
of the north of Europe. It is by its contin-  
-ing ~~on~~ the fibres of ~~the body~~ that a free-  
zing of Cold Water increases the pain of  
the rack when thrown upon the body.  
It acts by increasing ~~the~~ <sup>tendency to</sup>  
a solution of continuity. ~~Less~~ the pain of  
contraction is added to that of distension. —

Let us next inquire into the relative  
effects of cold in producing Disease, and here I  
shall follow the same order as in speaking of the relative

1. Its morbid effects are lessened by its  
Uniformity. The most healthy winters I  
have known in Philad<sup>a</sup> have been those  
in which a dry - uniform cold prevailed.

V This is obvious every day from the <sup>not only to</sup> insensibility of the face and hands to the coldness of the air, but to the coldness of the water with which we wash ~~our hands & face~~ them every morning. The association of the hands and face with the whole body is destroyed by habit. The same thing does not take place when the feet are immersed in cold water. The whole body sympathizes in the cold induced in them.



I observed ~~this~~ it the first time in the  
 year 1764 when a ~~student~~ of medicine.  
 Diseases are locked up in Canada ~~and~~ <sup>Norway</sup>  
 & in Russia During the winter. [Even the  
 Catarrh (the usual disease of variable  
 the winter) is unknown ~~in that~~ Dr  
 Guthrie tells us in the ~~latter~~ <sup>Russia and the</sup> ~~Courtesy~~  
~~same~~ <sup>the latter</sup> ~~Account~~ <sup>Courtesy</sup>]. The  
 same account is given by Pontoppidan  
 of the healthiness of the winters in Norway.  
 They are so in all those countries, only  
 because they are uniformly cold & dry.  
 2 The morbid effects of cold are ~~increased~~ <sup>lessened</sup>  
 time and habit. Cold after a while produces  
 insensibility, not only to itself, but to heat.  
 This has often been observed in the West-  
 =Indies, where the Europeans bear the intense

V It is felt every day from the insensibility  
of the face and hands to the coldness of the  
water with which we wash them every  
morning.



heat of the Sun better than the natives of  
 the Islands. This insensibility to heat is  
 to be acquired only by <sup>the long action</sup> ~~living in a climate~~  
~~that is~~ of cold, <sup>upon the body</sup> alternated with little  
 heat. In a Climate like ours we lose  
 the insensibility of to Cold contrasted <sup>in</sup> by  
 a single winter by the succeeding heat of the  
 summer. The man therefore who attempts  
 to fortify himself against the cold in  
 Pennsylvania by light clothing will  
 have his work to begin and do over  
 again every winter. [If he should acquire  
 his long drought for insensibility to cold  
 it will be in the same way in which a  
 farmer taught his horse to live without  
 eating. <sup>as soon as</sup> ~~His experiment succeeded, but~~  
 the poor animal died immediately.

V the feet and trunk of the body from  
an insensibility to cold contracted from  
~~washing them every morning in C~~ by  
their being <sup>lastly</sup> more constantly exposed to  
the cold.



was perfectly taught his new lesson,  
he died.]—

3 They are lessened by the natural insensibility of some parts of the body to this operation. The lungs feel the cold, much less than any other part of the body. The head is insensible to it in the next degree. <sup>It is</sup> from this <sup>power</sup> activity of resisting cold in the head <sup>of the brain</sup> that it is seldom perhaps warmer cold in the cold fit of an inter-mittent. The hands & face suffer <sup>less</sup> than

4 They are lessened by <sup>in all those persons</sup> ~~acting upon~~ <sup>nervous</sup> who are affected with the <sup>system</sup> of Thunison—that is who possess a predisposition to nervous Diseases. Hence hysterical patients ~~have~~ suffer least in cold weather.

5 They are less harmful to children than to grown people. Thompson relates an instance of a child being found alive upon ~~its mother's~~ the back of its mother who was frozen to death.

✓ provided they do not exceed the <sup>80°</sup>  
or the natural temperature of the hu-  
man body. Beyond this grade, no  
sensation of cold is felt from the de-  
scend of the mercury in the thermometer.



The morbid effects of Cold are increased,

1 by previous heat. <sup>The Cold</sup> ~~this~~ acts differently according to the following circumstances.

1 the degrees of previous heat. the higher the grade of heat the more sensibly ~~the~~ small

deviations from it act upon the body, <sup>the mercury</sup> but Mr. Dyre says the Air when ~~it~~ fell from

112° to 80° ~~at Naples~~ After a tyrocco wind

had passed over the City of Naples, was attended with a painful sensation of Cold.

Baron Humbolt informed me that a sudden fall of the  $\bar{g}$  from 90° to 80° gave him

~~the~~ a similar sensation in South America.

The sensation of Cold was ~~expressly~~ still more painful to Dr. Lardner when he passed from a room in which the mercury stood at 110° - into the open air in which

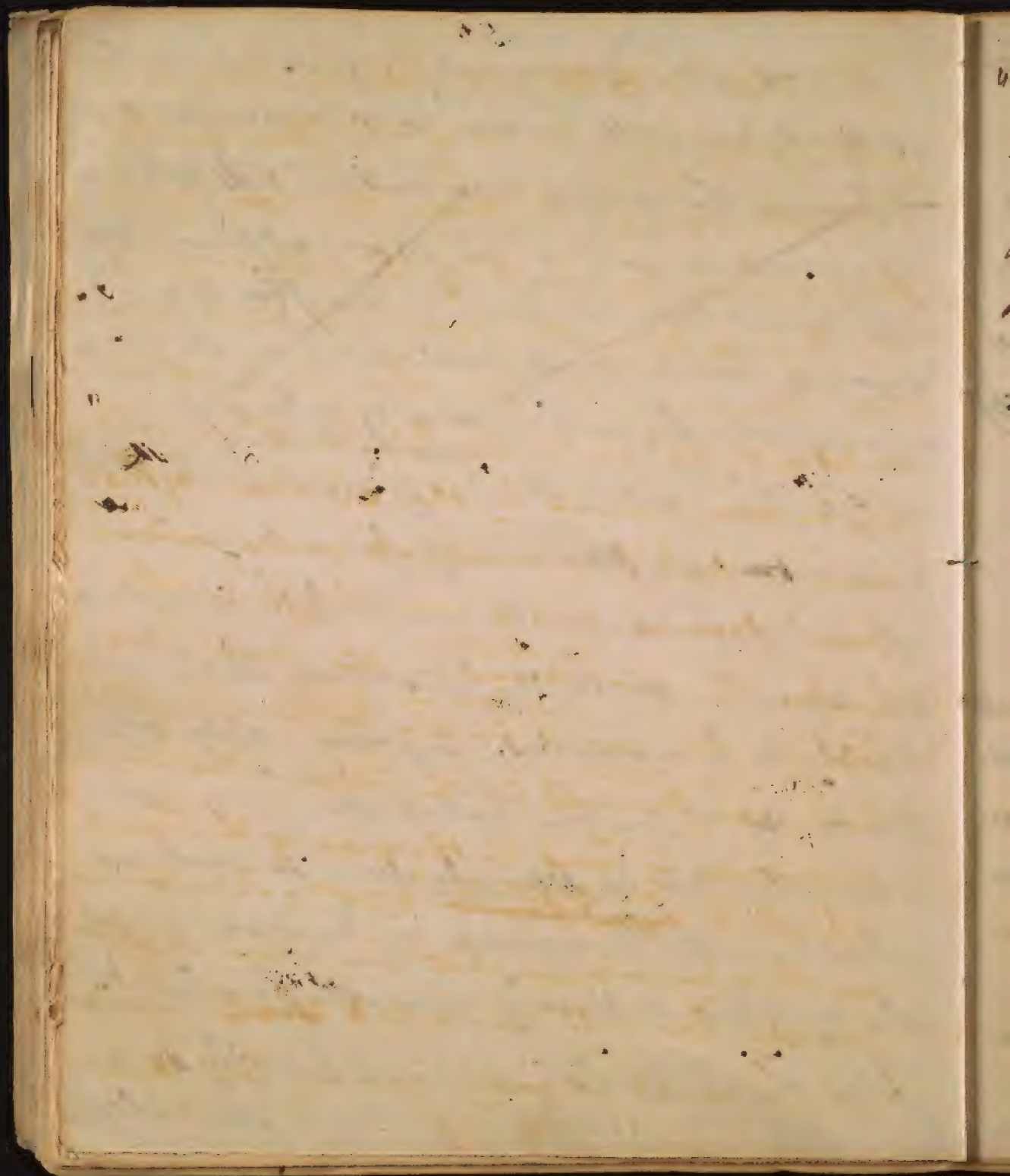
✓ The pestilential effects of the night air  
in Egypt depend chiefly upon the difference  
between its temperature, and that of  
the preceding day. But



it was <sup>50</sup>45. Dr. Moseley's facts upon this  
subject are still more to our purpose.

~~Even the great relaxation & debility of  
the nervous system in tropical climates,  
the most trivial change in the air <sup>ch</sup>  
makes but a small variation on the ther-  
mometer is productive of a lens at  
(says the Doctor)~~

" If the heat of the Air should sink to <sup>50</sup>72:  
and remain stationary for a day, in  
places where the medium is <sup>50</sup>80: it produces  
an aguish, or chilly sensation that is  
hardly to be described. Again - adds the  
Doctor if " in the habitable mountains  
where the air is scarcely ever so cool as  
what is called temperate in Europe, people  
who go there suddenly from the low lands,  
find the coldness at first hardly sup-  
portable





" and that intolerable Cotonus which is  
 felt at the summit of the blue mountains <sup>in Jamaica</sup>  
 [About 2400 yards above the level of the  
 sea) is but the effect of the suddenness of  
 the change from the scorching heat below.  
 The thermometer on these mountains  
 is about  $44^{\circ}$  in the day time &  $20^{\circ}$  at night.  
 The diseases produced by this ~~exhaustion~~ <sup>are</sup> of heat  
 from a high to a moderate grade, induces  
 fever, spasms - and a crumbles in the  
 limbs. The first occurs <sup>viz: ~~fevers~~</sup> in the West India  
 Islands. The second <sup>viz: spasms</sup> in the East Indies, & the  
 last <sup>viz: crumbles</sup> was observed in the soldiers who marched  
 from Suez to Cairo in the year of the French  
 & English <sup>Campaign in</sup> ~~expedition to~~ Egypt. So numerous  
 are these diseases in hot countries, that Dr.  
 Mosely has well remarked ~~that~~ "however  
 paradoxical it may appear, cold to be

V But how shall we ~~answer~~ reconcile these facts with the account we gave of the insensibility of the body to those great transitions from ~~to~~ intense heat to cold in Finland, Russia & South America. I answer, the heat <sup>of the baths</sup> in these cases is more intense, and more destructive to sensibility than <sup>the ordinary heat</sup> in the West Indies. In the latter country heat so far from destroying sensibility <sup>often</sup> increases it. But there may be another reason why the an extreme of cold does not induce disease when it succeeds ~~low intense~~ great heat. It may by its sedative and great sedative power produce reaction in ~~this~~ the system, and thus counteract its over enervated effects. In the same way we often suffer <sup>less</sup> from standing on or walking in an air at  $32^{\circ}$  than at  $45^{\circ}$ , or  $50^{\circ}$ . The former produces reaction, and thus prevents the disease. The latter =



the Cause of ~~all~~ almost all Diseases in hot climates to which Climate alone is <sup>causing</sup>. It is for this reason the Doctor very justly says the natives of the Islands are always in a state of predisposition to Disease.

2 Cold acts differently according to the Duration of previous heat. ~~the longer~~ the longer the body has been exposed to heat the less it suffers from the Cold, in consequence of the heat destroying sensibility not only to itself, but to Cold likewise, and the shorter the Duration of the <sup>heat</sup> ~~the~~ which precedes Cold, the more hurtful it becomes to the body.

3 It acts differently according to the greater or less excitability of the system. It has been observed that certain Animals perish in a degree of Cold, <sup>in the beginning of Winter</sup> that revives them in the Spring. In the former season this

= degrees of Cold act too feeble as a sedative  
for that purpose. This ~~is~~ the inhabi-  
-tants of Cuba (Ulloa tells us) when mo-  
-derately wet, plunge themselves into the  
-first Stream of Water they meet with,  
in order to <sup>avoid</sup> taking Cold. The quantity  
of Water in this case brings on reaction,  
and thus prevents disease. A Cold Bath  
at 50° is often safer and more salutary  
for the same reason than a Bath at 75.  
The former by its greater depression of the  
System, produces greater reaction. This remark  
will be applied to the speaking of Cold as a  
remedy. It teaches us the danger of using very  
cold water in violent diseases. It is rendered  
less hurtful by being applied a great while  
so as to weaken the irritability of the  
Vessels. return to 2. p. 57.

‡ Cold water poured <sup>under</sup> the Sleeve of  
the Coat with the arms elevated gives great  
pain. It is one of the modes of punishment  
in the ~~new~~ Jail of this City.



excitability is exhausted - in the latter, it is accumulated by the previous cold of the previous winter. —

4/ It acts differently according to its greater or less variations. As small variations <sup>more easily</sup> when the mercury fluctuates between 50 & 60.

of heat produce disease so do those of cold, <sup>provided they ascend from 70 to 80 or below 50.</sup> ~~provided they ascend from 70 to 80 or below 50.~~

5/ The morbid effects of cold are increased by the frequency & suddenness of the ~~cold~~ alternations of heat and cold. <sup>Recall that here what was said of the gradual & sudden application of heat to the body.</sup>

6/ ~~That~~ cold acts more or less certainly in producing disease according as it is applied to ~~a part~~ <sup>or</sup> the whole, ~~of~~ a part of the body, or upon a part that has been confined from, or exposed to the action of the air. † Cold best often produces Catarrh, Colic, and even palsy & apoplexy. The cold hand of a physician will sometimes produce a rigor in the whole body of a

✓ A lady died of a Consumption in this city about 40 years ago by <sup>in consequence of</sup> sitting a whole evening with <sup>one of her feet</sup> ~~the foot of her foot~~ chilled by stepping into a pail of cold water. ~~more~~ It is from the partial effects of cold upon the body, that more colds are taken by sitting before a large fire with the back exposed to currents of ~~cold~~ cool air from <sup>leaky</sup> doors & windows, than from exercising a whole day in the open air in cold weather with every part of the body alike exposed to it.

⊙ The Consumptions which have so much increased in ~~various~~ <sup>various</sup> parts of late years among <sup>in</sup> the women of our country I believe are owing in part, to their naked elbows and ~~upper arms~~ <sup>upper arms</sup>. Those parts sympathize in an eminent <sup>degree</sup> ~~degree~~ with the lungs.

The partial application of cold is felt when it is applied to the lungs only. Cold air inhaled while the body was warm reduced the pulse 5 strokes in a minute. It is from this partial action of cold upon the body thro' the medium of the lungs that colds are



patient, and I know a gentleman in  
this city [Mr Geo. Chapman] who is subject  
to a Cough, who can excite a fit of cough-  
ing at any time ~~day~~ in the night, only  
by putting his hand out of bed. —

A current of Air against the neck often  
brings on trismus, stiffness, ~~an~~ inflam<sup>n</sup>.  
~~on that part of the body,~~  
and sometimes trismus or a locked jaw.

I once knew a young <sup>at any time</sup> woman who by  
~~too~~ having off a ribbon which she usually  
wore upon her cap, was affected with  
Coryza, and we had a citizen ~~with~~ of  
Philad<sup>a</sup> ~~by~~ who was affected with Asthma  
every time he passed a forenoon with his  
shoes down at the heels. <sup>v</sup> All these indis-  
positions <sup>and diseases</sup> are the effects of the loss of the  
equilibrium of the system. They should  
be the importance of guarding ~~very~~

= are so often taken ~~into~~ by invalids  
who sleep in a cold room, after passing the  
whole day in a room of a warm & pleasant  
temperature. return to 10 60 =



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partial on  
part of the body from the unequal ef-  
fects of Cold in all ~~Chronic Diseases~~ positions  
to disease.

7 The morbid effects of the same degree of  
Cold are much increased by being com-  
bined with Wind. ~~It is proved~~ Diseases  
of the Breast are often induced by them.

8 Moisture increases the morbid effects  
of Cold. ~~It~~ It acts like Wind by carrying  
circumambient  
off the heat of the body. The Cold of Great  
Britain at 30° is much more disagreeable  
than the Cold of Russia at 10°. The Russian  
Sailors who spent part of <sup>the</sup> winter 1771  
at ~~Spitzbergen~~ <sup>Plymouth</sup> declared that  
the most cold of England was far more  
insupportable to them than the coldest  
weather they had ever before felt in their

✓ It is to the common operation of  
Cold and Moisture that the Scrophulous  
is more common in Great Britain  
than it is <sup>any other</sup> ~~this~~ Country. ~~and~~ The poor  
suffer most from this disease chiefly  
because they are more exposed to its  
remote Cause from the want of  
sufficient fuel and cloathing.



own Country. The Air of Holland owes  
its unwholesome quality to ~~its~~ moisture,  
~~It is~~ combined with Cold. It is to  
<sup>the effects of</sup> Obviate both, that the Dutch are obliged  
in the evening to increase their clo-  
thing - for at that time ~~the~~ moisture  
abounds most in this Atmosphere. ✓

of Cold acts more ~~so~~ certainly upon old,  
than upon young or middle aged persons.

It has often been remarked that very cold  
Spells of weather (as they are called) in our  
City - that is, weather in which the mercury  
descends below 10 <sup>to</sup> proves fatal to ~~very~~ ~~old~~ ~~people~~  
<sup>very</sup> old people. They generally perish  
in their beds, probably from the want  
of a sufficient quantity of bed Clothes.  
10 ~~to~~ Dutchards are more affected by

*[Faint, illegible handwritten text in cursive script, likely bleed-through from the reverse side of the page.]*

*[Partial view of handwritten text from the adjacent page on the right.]*



cold than sober people. Three <sup>men</sup> notorious  
 for the ~~the~~ Drunkenness, died in the course  
 of six weeks in the winter of 1791. 2. Du-  
 ring the coldest week in January. ~~and~~  
 in ~~moderate~~ There is a great predisposition in  
 Drunkards to be affected by Cold, & hence we  
 sometimes observe them to be chilly even  
 in moderate weather.

11 Cold is more disposed to produce disease  
 when the stomach is empty than when  
 it is full of Aliment, - ~~but~~ <sup>who</sup> Sailors <sup>suffer</sup>  
 from Cold are often predisposed to it from  
 the long fasting to which cold & bad weather  
 at sea exposes them.

12 Cold acts more certainly & more powerfully  
 upon the system in the sleeping than in  
 the waking state. It has been found that  
 a man dies in a cold of 8:0 or 9:0 below

*[Faint, illegible handwritten text in cursive script, likely from a 17th or 18th-century manuscript. The text is written in dark ink on aged, slightly discolored paper. There are several dark ink blotches and a horizontal line of ink near the bottom of the page.]*

with



0, ~~but~~ when asleep; whereas a man who is awake & in exercise will survive a degree of cold 30° below 0. The more frequent attacks of fevers in the night than at any other time is be ascribed chiefly to the greater influence of cold upon the body in a sleeping than in a waking state.

13 Invalids who are <sup>particular</sup> accompanied with the friction of <sup>with weak</sup> or chronic diseases, <sup>particularly of the nerves</sup> are always predisposed to be ~~and~~ injured <sup>by</sup> cold.

~~Upon reviewing the morbid effects of cold we cannot help being struck with their number, & violence, and the misery that is connected with them. Perhaps there is more animal suffering from~~

14 ~~The morbid effects of cold are more hurtful~~  
Cold is more hurtful in the human

~~It shows what has been said you will see:~~  
~~= described the reason why the diseases of the~~  
~~four seasons of the influence of Cold climates~~  
~~upon the body in producing diseases, but~~  
~~of the four seasons of the year. That~~  
~~you will be able to account for the~~  
~~variety and changes in the diseases of~~  
~~the four seasons of the year.~~



It is autumn when the body is impregnated with putrid miasmata than at any other time. I have twice seen several hundred persons indisposed <sup>with fever</sup> from the London (in which the mercury fell between 28 & 30°) of a single night, exceeding a hot day in the month of August, who would feel scarcely a slight Catarrh from the same change in the weather in the months of June, or November. &c.

In reviewing the morbid effects of Cold, we cannot help being struck with their number & violence, and the misery that is connected with them. Perhaps there is more animal suffering from Cold than from any other cause. The whole brute creation groans under <sup>it</sup> millions of animated creatures perish from it every year. But to man it is hurtful & destructive in a high degree. Who can calculate

The first of these is the fact that the  
 world is not a uniform whole, but is  
 divided into many different parts, each  
 of which has its own peculiar character  
 and its own laws. This is the case with  
 the human mind, which is not a single  
 entity, but is composed of many  
 different faculties, each of which has  
 its own peculiar powers and its own  
 laws. This is the case with the human  
 body, which is not a single entity, but  
 is composed of many different parts,  
 each of which has its own peculiar  
 powers and its own laws. This is the  
 case with the human soul, which is  
 not a single entity, but is composed  
 of many different faculties, each of  
 which has its own peculiar powers and  
 its own laws. This is the case with  
 the human mind, which is not a single  
 entity, but is composed of many  
 different faculties, each of which has  
 its own peculiar powers and its own  
 laws. This is the case with the human  
 body, which is not a single entity, but  
 is composed of many different parts,  
 each of which has its own peculiar  
 powers and its own laws. This is the  
 case with the human soul, which is  
 not a single entity, but is composed  
 of many different faculties, each of  
 which has its own peculiar powers and  
 its own laws.



the pains and distresses of Sailors, Soldiers  
& the labouring poor from this Cause?

— how numerous ~~are~~ and fatal are the  
diseases induced directly by its simple  
operations! and <sup>but</sup> ~~how~~ still more numerous  
& fatal are its effects when combined

with moisture and misornate! ~~It~~  
may be considered as the exciting cause of nearly all disca-  
— has been strangely overlooked in the  
— up. It is

inventory of human evils, but I be-  
— live the facts that have been enu-  
— rated, authorize us to assert that there  
does not ~~even~~ exist upon our globe  
a greater <sup>physical</sup> enemy to the ~~life~~ health, and  
life of man than Cold. — the effects of

But numerous; distressing and fatal as  
cold has been represented to be, they do not  
exist by an invincible law of nature.

~~where~~ where men live agreeably to reason

The Deaths in Petersburg are said to be  
1 male in 9, and 1 female in 13 annually  
After they pass the between the 20<sup>th</sup> & 25<sup>th</sup>  
years of life, and most of them from the  
intemperate Use of Brandy disposing to  
fevers. These fevers are  $\frac{1}{4}$  pleuritic  $\frac{1}{6}$   
consumptive &  $\frac{1}{3}$  common fevers making  
 $\frac{5}{7}$  of all who die } smallpox.



health & longevity <sup>by</sup> are nearly as common  
in Cold as in warm Countries, and even  
in those Countries where they are not so,  
it is probable ~~they are~~ diseases are indu-  
ced, and life shortened by the excessive use  
of ~~strong~~ ardent spirits, animal food &  
dancing which are resorted to, ~~to~~ in order to  
counteract the effects of cold. Thick walls  
double windows, and ~~for~~ close <sup>in the</sup> stoves ~~at~~  
hearth, and ~~fire~~, and foot stoves in the  
open air, afford an ample protection from  
the cold in Canada and Russia. This is  
so much the case, that De Quincie tells us  
~~that Russians complain~~ the Calamity is  
unknown in the latter Country in their sever-  
est winters. ~~Some~~ ~~have~~ ~~Native~~ of the  
middle states who pass a winter in Canada

৫৬



apart so they suffer less from the cold there, than in their own country.

Now is a Climate such as that of the Southern parts of Europe and of the United States in which the Thermometer is constantly fluctuating between heat & cold equally unhealthy where the inhabitants accommodate their Drees and manner of living to the changes in the weather. ~~Now~~ where persons object to <sup>the trouble of</sup> changing their Cloaths daily, or two or three times a day, when the changes in the weather require it, they should wear cloaths warmer than is agreeable to them. By this means many people escape the diseases of middle & variable climates.

*[Faint, illegible handwritten text in cursive script, likely a letter or journal entry.]*

*[Small, dark ink mark or signature at the bottom left of the page.]*



Now does Moisture when combined with Cold, necessarily produce sickness.

This is evident from the healthy complexions and robust bodies of the inhabitants of Great Britain & Ireland. The morbid effects of this Union of ~~the~~ moisture with Cold are obviated by constant labor, suitable clothing, - and the influence of habit upon the body. - ~~The remarks of~~ Dr. Sydenham confirms this remark. ~~as~~ <sup>as</sup> the one made under the preceding head. He says most of the acute

diseases of Great Britain are ~~the~~ produced by <sup>the neglect or</sup> ~~the~~ the want of <sup>sufficient</sup> clothing ~~to~~ <sup>things</sup> to protect the body from Cold. The same ~~remark~~ <sup>acute diseases</sup> produces or excites nearly all the ~~acute~~ <sup>acute</sup> ~~diseases~~ <sup>diseases</sup> in the middle states of America. I have been called to many thousand people in-  
-disposed





70  
with fevers from wearing too thin cloaths,  
or sleeping under too few bed cloaths, but  
never one person indisposed from an  
excess in the use of either of those articles.

I shall <sup>conclude the history</sup> ~~now up what has been said~~  
of the effects of heat, cold, moisture, <sup>dryness &c</sup> ~~dryness &c~~  
upon the body, by repeating that <sup>none</sup> ~~what~~  
of them are hurtful when they are uni-  
-form. <sup>It is</sup> ~~It is~~ <sup>from a moisture atmosphere</sup> ~~from a moisture atmosphere~~  
<sup>when not alterna-</sup> ~~when not alterna-~~

~~ted with dry weather for several months  
is not unhealthy. This has been taken  
notice of by Dr Wintringham in his account  
of the Epidemics of Great Britain. They  
chiefly from~~

<sup>chiefly</sup> ~~It is~~ the changes ~~only~~ in the sensible  
qualities of the air that we derive all the

diseases that have been ascribed to them.





